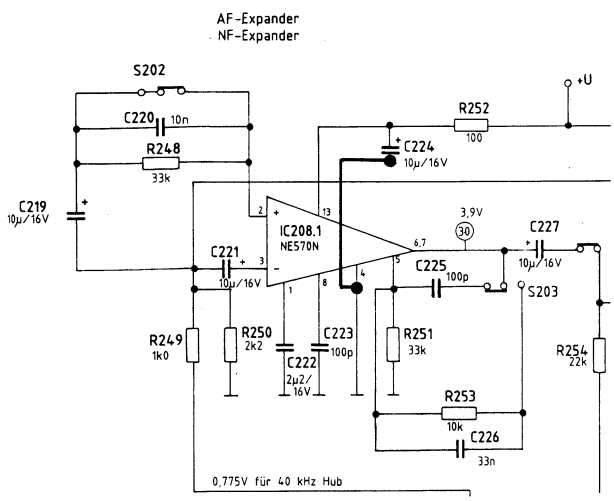
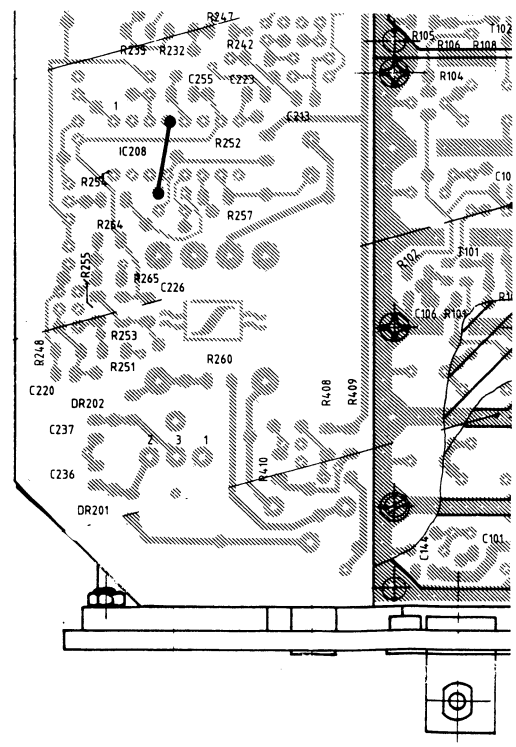
SENNHEISER
Service

si 881219-14

Betr.:	EM 2003 TV
Fehler:	50 Hz-Brummen bei Empfang eines unmodulierten HF-Trägers
Ursache:	Unzureichende Masseverbindung am HiDyn-IC
Abhilfe:	Massebrücke zwischen C 224 und Pin 4 / IC 208.1 auf Lötseite einbauen. Dadurch wird eine Verringerung des Brummens um 6 dB erreicht.

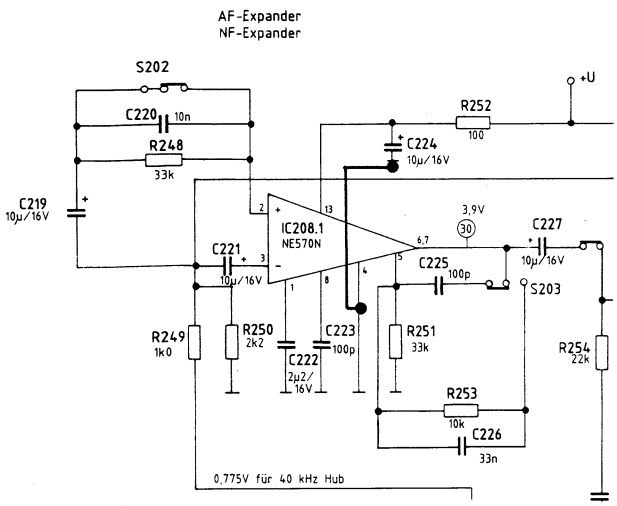


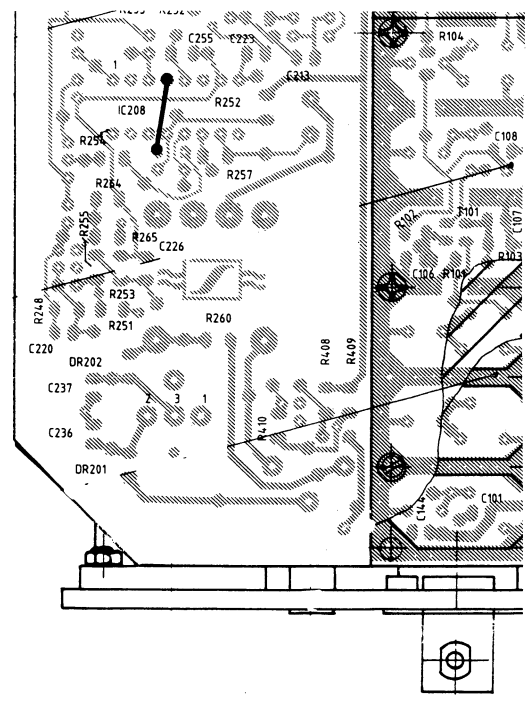


SENNHEISER
Service

si 881219–14 e

Ref.:	EM 2003 TV
Fault:	50 Hz hum when the EM 2003 TV receives an RF-carrier without modulation.
Cause:	Insufficient ground connection at HiDyn-IC
Remedy:	Connect ground connection of IC 208.1 to ground connection of IC 224. This will reduce the hum by 6 dB.





Vorstufe
RF-Pre-Amplifier

Mixer

ZF Verstärker
IF Amplifier

ZF Verstärker+Demodulator
IF Amplifier+Demodulator

NF Verstärker
IF Amplifier

Expander

NF Endstufe
AF Amplifier

Squelch Comparator

Diversity-Comparator

Elektr.-Electronic-

Schalter Switch

Spannungswandler Voltage-Converter

Oscillator

Diversity/Squelch-Indicator

Pegel-Anzeige Dev./AF-Indicator

	1	2	3	4,101	102	103	5,6	7	8,9,11	10,104,105	106	111,110,112	113	119	215	116,117	118	120	121	122	124	125,126	128,127	40	41	42	43	44	45	46	47	48	49	50,53	51	
				201,60,202		61,64,203		62,63,65		204,205		211,210,212	213	219	115	216,217	218	229	15,16,17,18	221	222	19,20,21,22,23,24,224,25,26,225,226,227,228,227,28,29			39,31,301,302,303		32,33,304,305			35,36		306	37			38		310,308,311,309,312	R
	101	102		103,104,1	105,7	106,107,4,5,109,6	108	110,7,8,111	112 9	10 113	114	115	116	120,121			124	123	125	124,133,134		138,136,135,137	139	140,141		142	143,144										C
	201	52,202		48,49,53,203,204,54,50,51,205		55,206,207		209,56,208		210 211,57,212				220,221			224	223	225	226,233,234		236,234,235,237	239	240,241		242	18,243,244	19,20,21		30,31,32,34		33	35	36		40,41,42,43		
																									22	23,24		25,26		27		38,39,44				

BC 548 A
BC 548 B

BF 240

BF 981
top view

TAA 861A

TBA 820 M
LM 358 N
NE 5534 N
S 7611

NE 570 N
UAA 170
DG 243 C

IC 101
TDA 1576

EM 2003
EM 2003 R

Typ **EM2003F9**

Vorstufe
RF-Pre-Amplifier

Mixer

ZF Verstärker
IF Amplifier

ZF Verstärker+Demodulator
IF Amplifier+Demodulator

NF Verstärker
IF Amplifier

Expander

NF Endstufe
AF Amplifier

Oscillator

Multiplier

Squelch Comparator

Diversity-Comparator

Elektr. Schalter
Electronic-Switch

Spannungswandler
Voltage-Converter

Diversity-Squelch Indicator

Pegel-Anzeige
Drv./AF-Indicator

Netz

R	11	7	8	101	102	10	103	10,104,105	106	111,110,112	113	119	116,117	118	120	15,16,17,18	122	19,20,21,22,23,24	124	125,126	128,127	30,31,301,302,303	40	41	42	43	44	45	46	47	48	49	50	53	51
		9,201,60,202					61,64,203	62,63,65					216,217		229		222																	
C	101	102		103,104,	6	105,7,8	9,10	106,107,	109,11,108,12,13	110,14,111,15,112	113	114	115	116	120,121,122																				
	201	52,202		48,49,53,203,204,54,50,51,205			55,206,207		209,56,208	210	211,57,212	213	214	215	216	220,221,222																				

R	127	124	123	125	126,133,134	130,136,135,137	139	140,141	142	143,144	30,31,32,34	33	35	36	35,36	306	37	38	38,39,44	48,45,42,43	310,308,311,309,312
	227	224	223	225	226,233,234	238,236,235,237	239	240,241	242	18,243,244	22	23,24	25,26			27					
C	227	224	223	225	226,233,234	238,236,235,237	239	240,241	242	18,243,244	19,20,21										

BC 548 B C E

BF 240 E B C

BC 548 E B C

BF 960 top view G1 G2 S D

TAA 861A 6 5 4 / 1 2 3

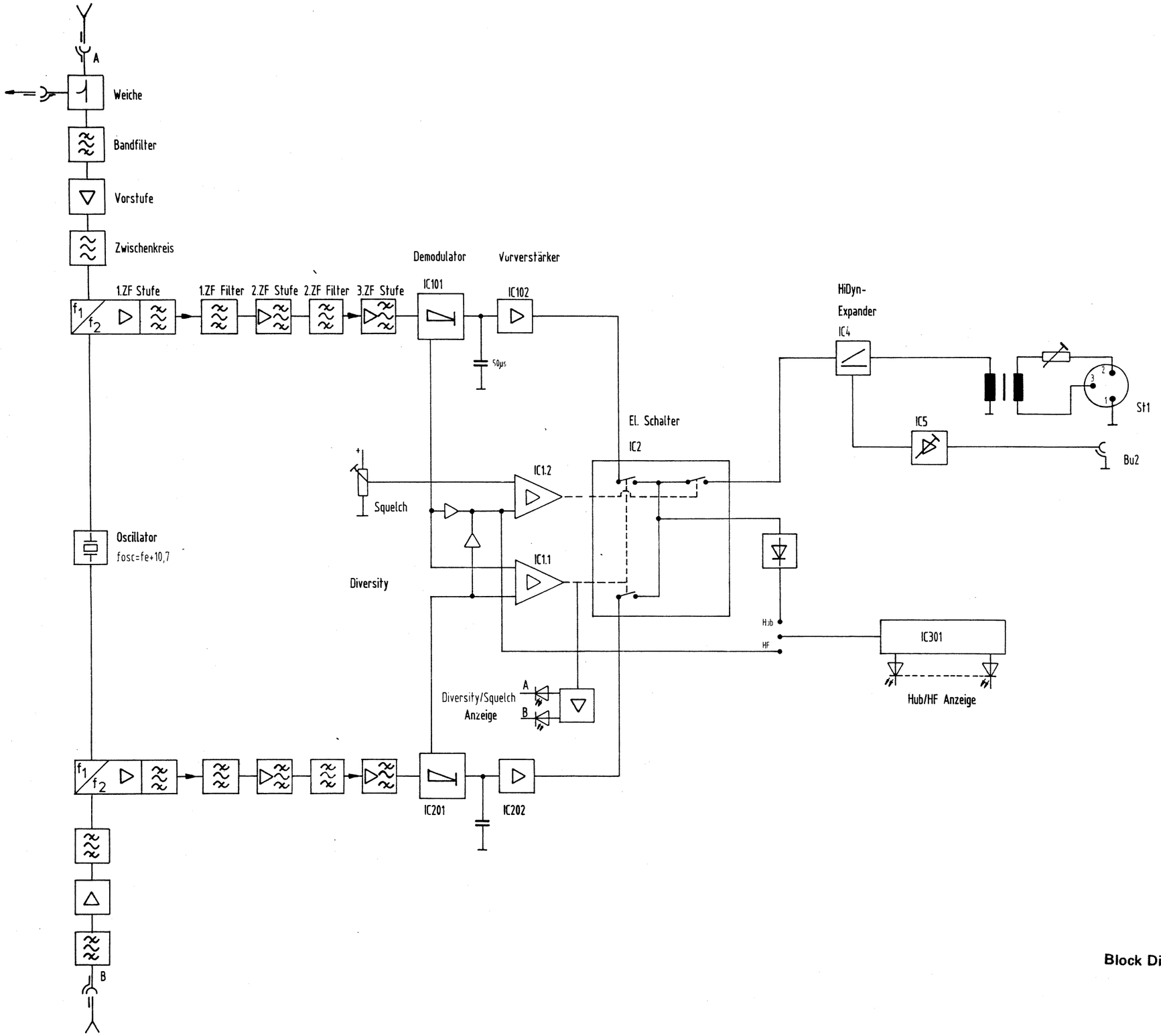
TBA 820 H 8 5 / 1 4
LM 358 N
NE 5534 N
SI 7661

NE 570 N 16 9 / 1 8
UAA 170
DG 243 CJ

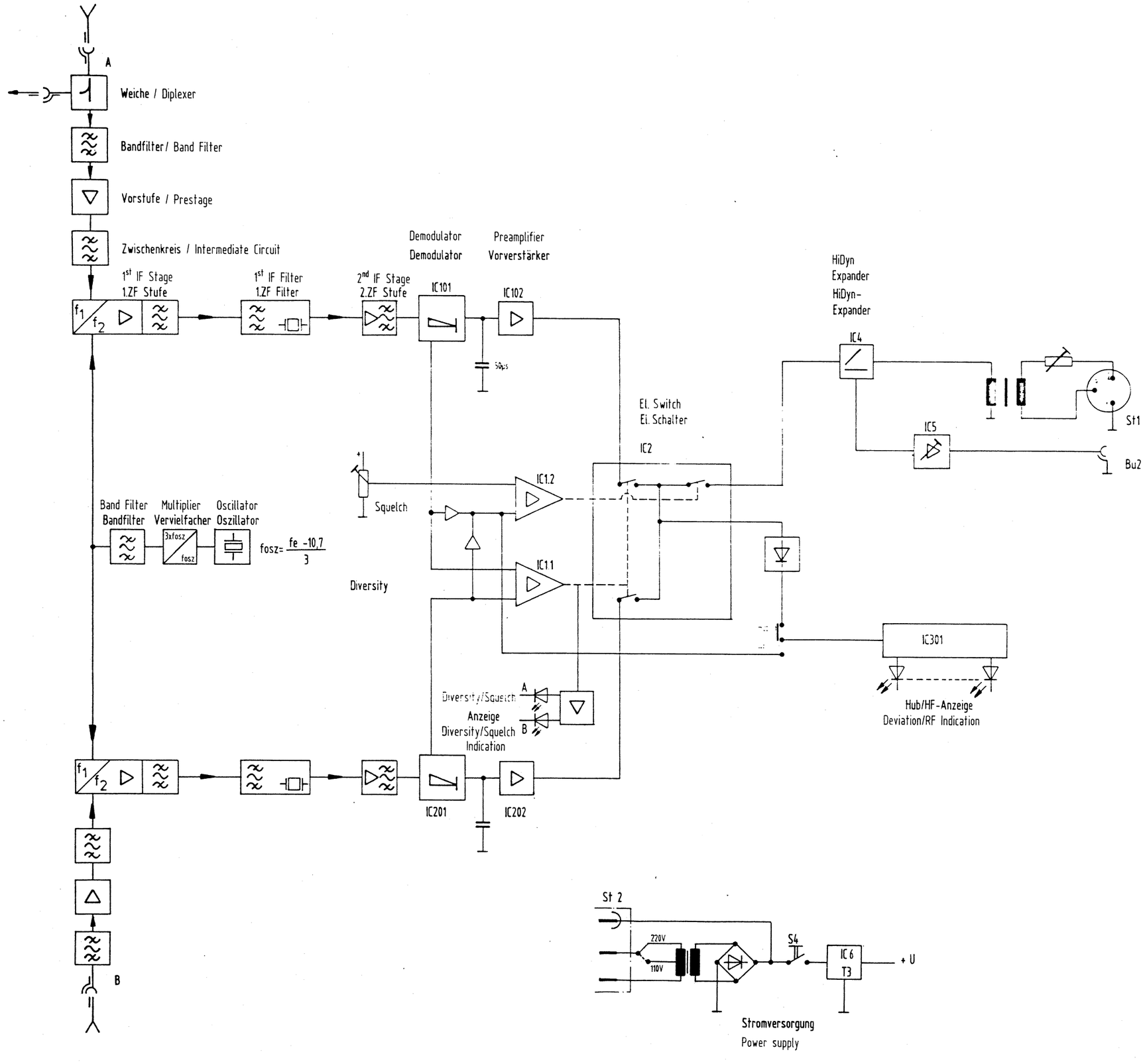
TDA 1576 10 / 1 9

EM 2003-9

Sennheiser



Block Diagram EM 2003



Block Diagram EM 2003-9